Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

62.67

LIBRARY
RECEIVED
APR 22 1946
U. S. Department of Agriculture.

REGISTERED RASPBERRY PLANTS

Grown By

Ohio Small Fruit Improvement Association, Inc.

This 8-year old Cumberland planting from Registered Stock produced 94 bushels per acre in its 8th fruiting season.

The Planting of
REGISTERED RASPBERRY PLANTS
INSURES

1. Better Stands
2. Better Yields
3. Long Lived Plantations
4. Quality Berries
5. More Profits
6. Satisfaction

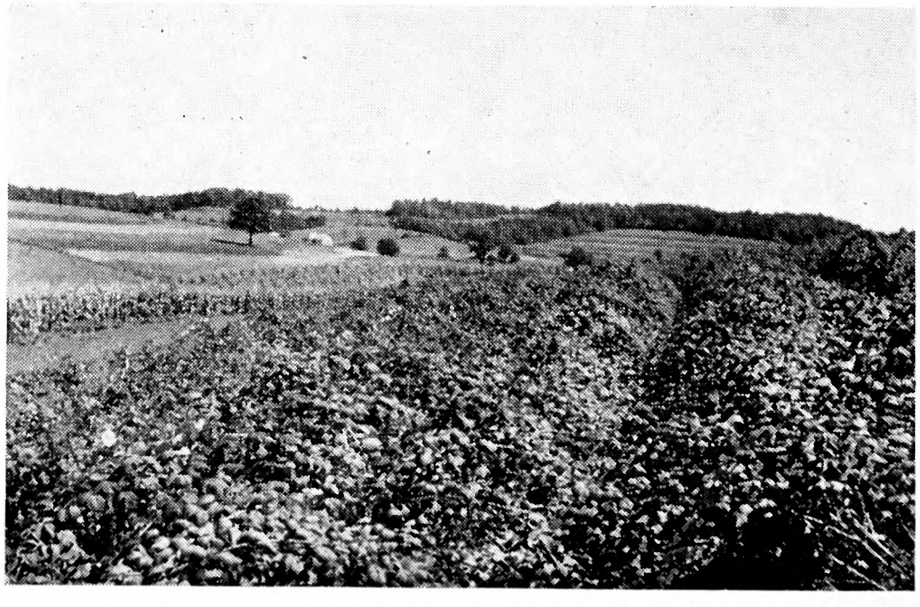
Raspberry Industry Threatened by Disease

Fifteen years ago the raspberry industry was in serious danger of passing out of existence. The so-called running out diseases had become so prevalent that it was no longer profitable to grow raspberries. Newly set plantings would last only two or three seasons. Low yields of poor quality, crumbly berries, were the rule. Consumers of raspberries recognized the low quality and the demand for this fruit was falling off. There was no way known to control these particularly destructive diseases. The trouble seemed to be in the sap of the plants and the diseases increased every time new plants were propagated. There was practically no healthy planting stock to be had anywhere.

Agricultural Research Supplies the Remedy

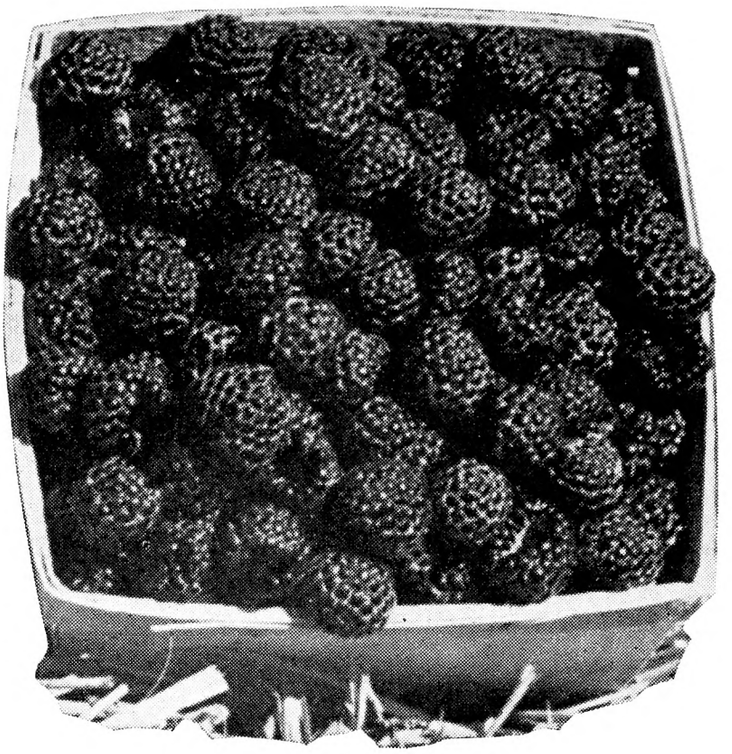
Plant disease specialists of the U. S. Department of Agriculture and the Ohio Agricultural Experiment Station were asked to aid in finding a solution of the raspberry disease problem. They found, first of all, that the "running-out" diseases were caused by plant viruses. These viruses were found to multiply again and again in the plant sap. They were beyond reach of any of the ordinary control practices, such as spraying. Once a plant became diseased it could not be cured. Unfortunately the diseased plant did not die immediately, but lingered on for several years, providing a constant source of infection for other plants. New plants propagated from diseased parents were inevitably diseased also.

With all this in mind the disease specialists realized that the only practical remedy was to provide raspberry growers with a source of healthy planting stock. Accordingly they selected the most disease-free stock obtainable and by careful inspection and rogueing gradually developed, over a several year period, a foundation stock which was relatively disease-free. This was distributed to a number of raspberry growers who were willing to cooperate in the fight on disease. The process of inspection and rogueing was continued by the disease specialists until a sizable stock of healthy plants of several varieties was developed. Then in 1927 the Ohio Small Fruit Improvement Association was formed as a cooperative organization to grow and sell healthy raspberry stock.



Plantings such as this are the source of Registered Plants

What Are Registered Plants?



Berries such as these are produced by Registered Plants.

Registered raspberry plants are extraordinarily free from disease; they are strong and vigorous and true to name; they are grown only by the Ohio Small Fruit Improvement Association. Registered plants are produced under regulations dictated by plant pathologists of the Ohio Agricultural Experiment Station and of Ohio State University. These regulations permit **not more than one per cent of virus disease and not more than one-fourth per cent of galled plants in the parent planting.** Contrast these percentages with those allowed by the certification regulations of Ohio, Michigan and New York (approximately 9 per cent of virus disease and varying amounts of gall). In addition the Association inspector must be approved by *both* the Plant Pathology Department of the Ohio Agricultural Experiment Station and the Ohio Department of Agriculture. They insist that this inspector must be a plant pathologist trained in the detection of raspberry diseases. **Three or more** annual inspections are made and any diseased plants found must be **burned out by the inspector.** You can readily see that registered plants produced under the above conditions **must** be more disease-free than the average certified plants sold under the regular certification regulations.

What Registered Plants Will Do

Given proper isolation from outside disease sources and proper cultural care, Registered Plants will produce for you a healthy, high yielding raspberry plantation which will remain profitable for a long period of years. Losses from the virus diseases and from gall will be negligible. You will be able to maintain a good stand of plants which will produce very high quality fruit.

The following summary of results taken from Michigan Quarterly Bulletin No. 11 shows the effect of disease on yields.

Plot A—572 disease-free plants set in 1925.

Plot B—572 plants purchased from trade set 1925.

YIELD RECORDS

PLOT A

26 cases 1st year 1926
36 cases 2nd year 1927
50.5 cases 3rd year 1928

PLOT B

5 cases 1st year 1926.

Plants removed to prevent spread of disease to Plot A.

Yield records taken in many plantings from registered and unregistered stock have proved the superiority of registered plants.

BLACK CAP VARIETIES

CUMBERLAND

This standard mid-season blackcap has long maintained its position as the best there is. It is still the most widely planted variety grown, both for the market and for home use. It is adapted to a wide range of climate and will do well anywhere blackcaps can be grown. The appearance and quality of the fruit is superior to any other variety. Cumberland berries will sell at a premium if you maintain its inherent high quality by keeping disease out by planting Registered stock.

Healthy Foliage and Fruit.

NEW LOGAN

The New Logan has definitely established itself as a profitable variety for commercial planting. It is somewhat earlier than Cumberland and picks heavy over a shorter season. Because of its drouth resistance and its early season New Logan will often produce a crop when other varieties fail. It is also somewhat disease resistant. New Logan berries are of fine appearance and good quality, being somewhat more tart than Cumberland. New Logan is particularly adapted to northern Ohio and in locations where isolation from disease sources is difficult.

BLACK BEAUTY

This variety was originated in central Ohio and seems particularly adapted to that region and farther south. It has not proved as successful in northern Ohio. It is a very vigorous grower, very hardy, and seems to escape disease more than most varieties. The berries are large and of good quality, firm, black and slight bloom.

NEW VARIETIES

As it is always necessary for us to start with ordinary certified plants when propagating new varieties, it has taken several years to rid this stock from the virus diseases and crown gall so that the plants can be "Registered". We now offer registered stock in small lots of the following varieties:

BRISTOL—A very promising new blackcap ripening a few days ahead of Cumberland.

NAPLES—This variety has proved to be the most satisfactory of the late varieties. It ripens nearly one week after Cumberland.

QUILLEN—A mid-season variety noted for its resistance to the fungous disease, anthracnose.

Prices of new varieties will be quoted on request.

For other prices see back page.

RED VARIETIES

LATHAM

A typical Registered Latham nursery planting. Note vigor.

Latham is the most popular and widely grown red raspberry on the market. High yields of very attractive, large berries and its resistance to mosaic has made this variety a very profitable one to grow. Unfortunately we have been unable to offer Latham to our customers in the past because we had been unsuccessful in freeing this variety from crown gall and mosaic. Now after four years of hard work and with the very valuable assistance of pathologists from the Ohio Agricultural Experiment Station we are able to offer you **Registered Latham plants,** which, according to the state pathologists, appear free of crown gall and the virus diseases. This stock is limited in quantity, but certainly is a real value. Note the extreme vigor and strong growth of the nursery planting shown on this page.

NEWBURGH

This variety is rapidly gaining favor in the Great Lakes Region. It appears particularly adapted there and is even displacing Latham to a considerable extent. Its high yielding ability and the size and quality of Newburgh berries makes it a truly valuable and profitable variety to grow. Growers report that a premium of a few cents a quart can be obtained over other varieties on the market. This variety is several days to nearly a week earlier than Latham, and is seldom affected with mosaic.

NEW VARIETIES

Red raspberries are even more difficult to free from the virus diseases and gall than are the blackcaps. However, we are attempting to develop registered stock of several promising new red varieties and these will be offered for sale as soon as it is ready.

For prices of red varieties see back page.

How to Handle Your Plants

In packing and shipping registered plants we take every care so that they will arrive in good condition. When you receive plants which have been shipped, you should immediately unpack and examine them. If they have arrived in bad condition notify us promptly. After unpacking, your plants should be set in the field as soon as possible. Delay may result in poor stands. If your ground is not ready the plants should be stored in a cool place, but not where the roots will freeze. The roots of the plants should be kept from drying out, but too much moisture will lead to molding. If the plants are "heeled in" the bunches should be opened so that moist earth will be in contact with all of the roots. Extreme care should be taken to prevent breakage of the young tender sprouts coming up from the roots. Some breakage is unavoidable, but the less the better.

Suggestions for Raspberry Growing

Time of Planting

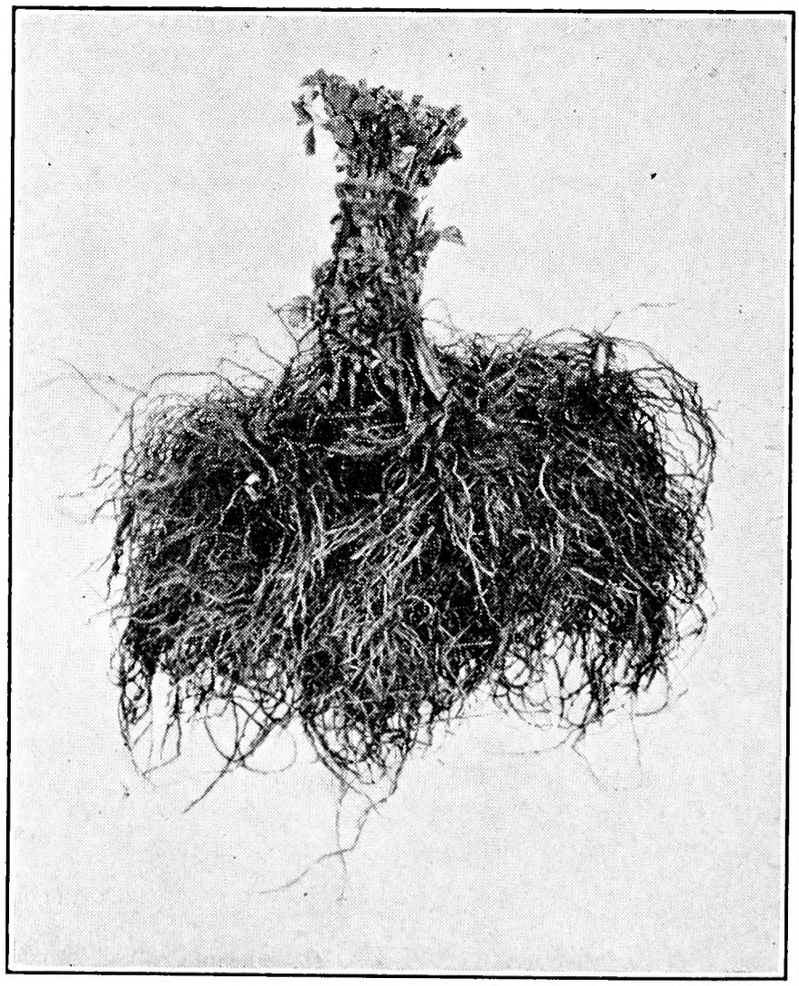
The best time to set either blackcaps or red varieties is in early spring as soon as weather permits. Reds may be planted with success in the fall.

Distance of Planting

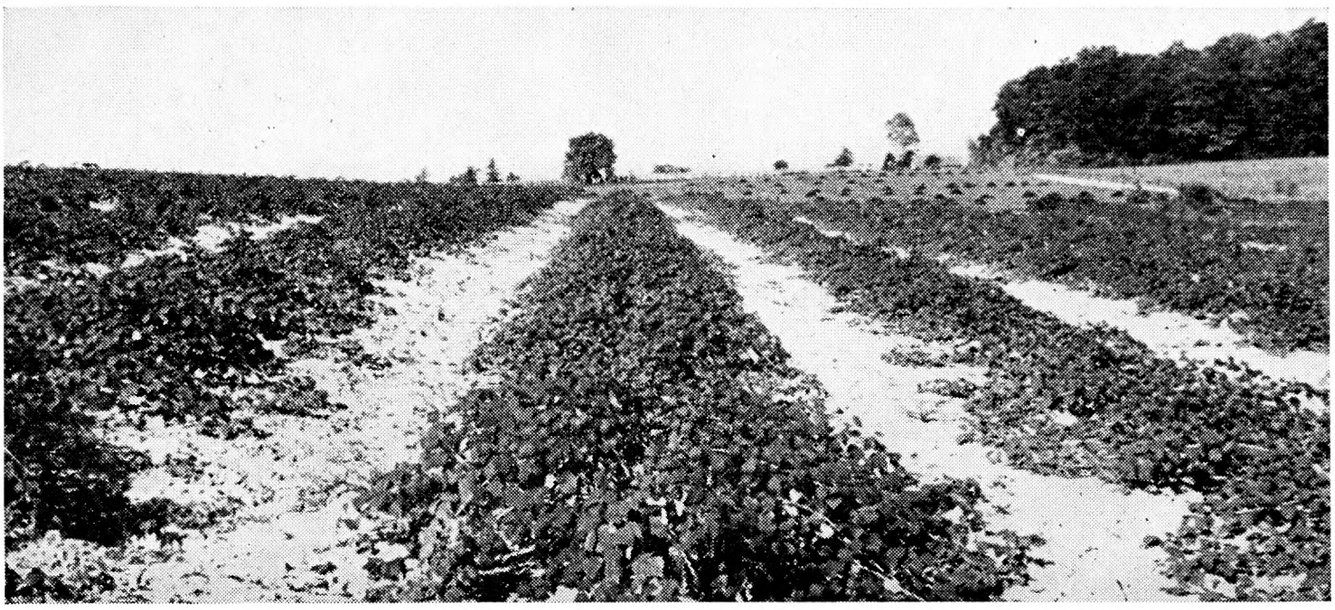
In general blackcaps should be set from 2½ to 3 feet between plants and from 7 to 9 feet between rows. Red raspberries are usually set 3 feet apart in rows 7 to 9 feet apart.

Procedure in Planting

Plants should at all times be prevented from drying out. Red raspberries may be planted with a spade, but blackcaps have a much greater root system and should be planted by digging holes large enough to accommodate the roots or by making furrows. The plants should be set firmly at approximately the same depth than they grew previously. Extreme care



A bundle of Registered Blackcaps



Planted with Registered Stock Spring of 1939. Picture taken Sept. 1 same year

should be taken to prevent breakage of the tender sprouts. The "handle" or woody cane of tip blackcap plants should be removed at planting to prevent anthracnose infection.

Isolation

Start your new planting on clean soil well isolated from outside disease sources. Do not plant blackcaps near any of the red varieties except Newburgh. This variety seldom is affected with the virus diseases.

Soil

Raspberry ground should be deep, well areated, fertile with plenty of humus, and **well-drained.** Raspberry roots will not stand excess water.

Fertilization

Liberal applications of a nitrogen fertilizer or manure should be made early each spring. About 300 pounds per acre of an ordinary nitrogen fertilizer is the correct amount for a planting after its first year.

Summer Pruning

In order to promote strong stocky plants, the terminals of new blackcap canes should be pinched out when they reach a height of 18 inches. This procedure stimulates lateral growth which will produce most of the fruit the following year. Reds should not be pruned in summer.

Winter Pruning

Blackcaps should be pruned in late winter. The laterals should be cut back very severely to a length of 8 to 12 inches from the main cane. Red raspberries should be pruned lightly; in general the top one-fourth of the canes are removed.

Spraying

Raspberries should be sprayed for Anthracnose each spring when the buds first show green with liquid lime-sulfur one gallon to 19 gallons of water. One application only is recommended.

PRICES

No. of Plants	Cumberland New Logan Black Beauty	Latham Newburgh
25 postpaid	$ 1.50	$ 1.75
50 to 300, per 100	3.00	3.50
300 to 1000, per 100	2.50	3.00
1000 plants	20.00	25.00
2000 plants, per 1000	18.00	22.00
3000 or more, per 1000	16.00	20.00

Prices F.O.B. shipping point except in 25's.
Deposit to accompany order. Net cash in full before shipment.

This Tag is Your Guarantee

We hereby guarantee that all plants sold by us as Registered are from fields admitted to this grade the previous season, and that they conform in all particulars to the standards of first grade stock set by the Standards Committee composed of Pathologists and Horticulturists of the Ohio Agricultural Experiment Station and Ohio State University. They are handled and packed with care to adhere to the standards of packing approved by the Association.

Ohio Small Fruit Improvement Association

BOX 308 - - - - WOOSTER, OHIO